



SEQUENCE LISTING

<110> DAVIDSON, BEVERLY L.
LAW, LANE K.

<120> ADENOVIRUS SEROTYPE 30 (AD30)

<130> 17023.013US2

<140> 10/621,006

<141> 2003-07-15

<150> 09/758,008

<151> 2001-01-09

<160> 24

<170> PatentIn Ver. 3.3

<210> 1

<211> 371

<212> PRT

<213> Adenovirus

<400> 1

Met Ser Lys Arg Leu Arg Val Glu Asp Asp Phe Asn Pro Val Tyr Pro
1 5 10 15

Tyr Gly Tyr Ala Arg Asn Gln Asn Ile Pro Phe Leu Thr Pro Pro Phe
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Val Ser Ser Asp Gly Phe Lys Asn Phe Pro Pro Gly Val Leu Ser Leu
35 40 45

Lys Leu Ala Asp Pro Ile Ala Ile Thr Asn Gly Asp Val Ser Leu Lys
50 55 60

Val Gly Gly Gly Leu Thr Val Glu Gln Asp Ser Gly Asn Leu Ser Val
65 70 75 80

Asn Pro Lys Ala Pro Leu Gln Val Gly Thr Asp Lys Lys Leu Glu Leu
85 90 95

Ala Leu Ala Pro Pro Phe Asp Val Arg Asp Asn Lys Leu Ala Ile Leu
100 105 110

Val Gly Asp Gly Leu Lys Val Ile Asp Arg Ser Ile Ser Asp Leu Pro
115 120 125

Gly Leu Leu Asn Tyr Leu Val Val Leu Thr Gly Lys Gly Ile Gly Asn
130 135 140

Glu Glu Leu Lys Asn Asp Asp Gly Ser Asn Lys Gly Val Gly Leu Cys
145 150 155 160

Val Arg Ile Gly Glu Gly Gly Gly Leu Thr Phe Asp Asp Lys Gly Tyr
165 170 175

Leu Val Ala Trp Asn Asn Lys His Asp Ile Arg Thr Leu Trp Thr Thr
 180 185 190
 Leu Asp Pro Ser Pro Asn Cys Lys Ile Asp Ile Glu Lys Asp Ser Lys
 195 200 205
 Leu Thr Leu Val Leu Thr Lys Cys Gly Ser Gln Ile Leu Ala Asn Val
 210 215 220
 Ser Leu Ile Ile Val Asn Gly Lys Phe Lys Ile Leu Asn Asn Lys Thr
 225 230 235 240
 Asp Pro Ser Leu Pro Lys Ser Phe Asn Ile Lys Leu Leu Phe Asp Gln
 245 250 255
 Asn Gly Val Leu Leu Glu Asn Ser Asn Ile Glu Lys Gln Tyr Leu Asn
 260 265 270
 Phe Arg Ser Gly Asp Ser Ile Leu Pro Glu Pro Tyr Lys Asn Ala Ile
 275 280 285
 Gly Phe Met Pro Asn Leu Leu Ala Tyr Ala Lys Ala Thr Thr Asp Gln
 290 295 300
 Ser Lys Ile Tyr Ala Arg Asn Thr Ile Tyr Gly Asn Ile Tyr Leu Asp
 305 310 315 320
 Asn Gln Pro Tyr Asn Pro Val Val Ile Lys Ile Thr Phe Asn Asn Glu
 325 330 335
 Ala Asp Ser Ala Tyr Ser Ile Thr Phe Asn Tyr Ser Trp Thr Lys Asp
 340 345 350
 Tyr Asp Asn Ile Pro Phe Asp Ser Thr Ser Phe Thr Phe Ser Tyr Ile
 355 360 365
 Ala Gln Glu
 370

<210> 2
 <211> 362
 <212> PRT
 <213> Adenovirus

<400> 2
 Met Ser Lys Arg Leu Arg Val Glu Asp Asp Phe Asn Pro Val Tyr Pro
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 Tyr Gly Tyr Ala Arg Asn Gln Asn Ile Pro Phe Leu Thr Pro Pro Phe
 20 25 30
 Val Ser Ser Asp Gly Phe Gln Asn Phe Pro Pro Gly Val Leu Ser Leu
 35 40 45
 Lys Leu Ala Asp Pro Ile Ala Ile Val Asn Gly Asn Val Ser Leu Lys
 50 55 60

Val	Gly	Gly	Gly	Leu	Thr	Leu	Gln	Asp	Gly	Thr	Gly	Lys	Leu	Thr	Val	65	70	75	80
Asn	Ala	Asp	Pro	Pro	Leu	Gln	Leu	Thr	Asn	Asn	Lys	Leu	Gly	Ile	Ala	85	90	95	
Leu	Asp	Ala	Pro	Phe	Asp	Val	Ile	Asp	Asn	Lys	Leu	Thr	Leu	Leu	Ala	100	105	110	
Gly	His	Gly	Leu	Ser	Ile	Ile	Thr	Lys	Glu	Thr	Ser	Thr	Leu	Pro	Gly	115	120	125	
Leu	Arg	Asn	Thr	Leu	Val	Val	Leu	Thr	Gly	Lys	Gly	Ile	Gly	Thr	Glu	130	135	140	
Ser	Thr	Asp	Asn	Gly	Gly	Thr	Val	Cys	Val	Arg	Val	Gly	Glu	Gly	Gly	145	150	155	160
Gly	Leu	Ser	Phe	Asn	Asn	Asp	Gly	Asp	Leu	Val	Ala	Phe	Asn	Lys	Lys	165	170	175	
Glu	Asp	Lys	Arg	Thr	Leu	Trp	Thr	Thr	Pro	Asp	Thr	Ser	Pro	Asn	Cys	180	185	190	
Lys	Ile	Asp	Gln	Asp	Lys	Asp	Ser	Lys	Leu	Thr	Leu	Val	Leu	Thr	Lys	195	200	205	
Cys	Gly	Ser	Gln	Ile	Leu	Ala	Asn	Val	Ser	Leu	Ile	Val	Val	Asp	Gly	210	215	220	
Lys	Tyr	Lys	Ile	Ile	Asn	Asn	Asn	Thr	Gln	Pro	Ala	Leu	Lys	Gly	Phe	225	230	235	240
Thr	Ile	Lys	Leu	Leu	Phe	Asp	Glu	Asn	Gly	Val	Leu	Met	Glu	Ser	Ser	245	250	255	
Asn	Leu	Gly	Lys	Ser	Tyr	Trp	Asn	Phe	Arg	Asn	Glu	Asn	Ser	Ile	Met	260	265	270	
Ser	Thr	Ala	Tyr	Glu	Lys	Ala	Ile	Gly	Phe	Met	Pro	Asn	Leu	Val	Ala	275	280	285	
Tyr	Pro	Lys	Pro	Thr	Ala	Gly	Ser	Lys	Lys	Tyr	Ala	Arg	Asp	Ile	Val	290	295	300	
Tyr	Gly	Asn	Ile	Tyr	Leu	Gly	Gly	Lys	Pro	Asp	Gln	Pro	Val	Thr	Ile	305	310	315	320
Lys	Thr	Thr	Phe	Asn	Gln	Glu	Thr	Gly	Cys	Glu	Tyr	Ser	Ile	Thr	Phe	325	330	335	
Asp	Phe	Ser	Trp	Ala	Lys	Thr	Tyr	Val	Asn	Val	Glu	Phe	Glu	Thr	Thr	340	345	350	
Ser	Phe	Thr	Phe	Ser	Tyr	Ile	Ala	Gln	Glu							355	360		

<210> 3
 <211> 366
 <212> PRT
 <213> Adenovirus

<400> 3

Met	Ser	Lys	Arg	Leu	Arg	Val	Glu	Asp	Asp	Phe	Asn	Pro	Val	Tyr	Pro	1	5	10	15
Tyr	Gly	Tyr	Ala	Arg	Asn	Gln	Asn	Ile	Pro	Phe	Leu	Thr	Pro	Pro	Phe	20	25	30	
Val	Ser	Ser	Asp	Gly	Phe	Lys	Asn	Phe	Pro	Pro	Gly	Val	Leu	Ser	Leu	35	40	45	
Lys	Leu	Ala	Asp	Pro	Ile	Thr	Ile	Ala	Asn	Gly	Asp	Val	Ser	Leu	Lys	50	55	60	
Val	Gly	Gly	Gly	Leu	Thr	Leu	Gln	Glu	Gly	Ser	Met	Thr	Val	Asp	Pro	65	70	75	80
Lys	Ala	Pro	Leu	Gln	Leu	Ala	Asn	Asn	Lys	Lys	Leu	Glu	Leu	Val	Tyr	85	90	95	
Val	Asp	Pro	Phe	Glu	Val	Ser	Ala	Asn	Lys	Leu	Ser	Leu	Lys	Val	Gly	100	105	110	
His	Gly	Leu	Lys	Ile	Leu	Asp	Asp	Lys	Ser	Ala	Gly	Gly	Leu	Lys	Asp	115	120	125	
Leu	Ile	Gly	Lys	Leu	Val	Val	Leu	Thr	Gly	Lys	Gly	Ile	Gly	Thr	Glu	130	135	140	
Asn	Leu	Gln	Asn	Thr	Asp	Gly	Ser	Ser	Arg	Gly	Ile	Gly	Ile	Ser	Val	145	150	155	160
Arg	Ala	Arg	Glu	Gly	Leu	Thr	Phe	Asp	Asn	Asp	Gly	Tyr	Leu	Val	Ala	165	170	175	
Trp	Asn	Pro	Lys	Tyr	Asp	Thr	Arg	Thr	Leu	Trp	Thr	Thr	Pro	Asp	Thr	180	185	190	
Ser	Pro	Asn	Cys	Arg	Ile	Asp	Lys	Glu	Lys	Asp	Ser	Lys	Leu	Thr	Leu	195	200	205	
Val	Leu	Thr	Lys	Cys	Gly	Ser	Gln	Ile	Leu	Ala	Asn	Val	Ser	Leu	Ile	210	215	220	
Val	Val	Ser	Gly	Lys	Tyr	Gln	Tyr	Ile	Asp	His	Ala	Thr	Asn	Pro	Thr	225	230	235	240
Leu	Lys	Ser	Phe	Lys	Ile	Lys	Leu	Leu	Phe	Asp	Asn	Lys	Gly	Val	Leu	245	250	255	
Leu	Pro	Ser	Ser	Asn	Leu	Asp	Ser	Thr	Tyr	Trp	Asn	Phe	Arg	Ser	Asp	260	265	270	

Asn Leu Thr Val Ser Glu Ala Tyr Lys Asn Ala Val Glu Phe Met Pro
 275 280 285
 Asn Leu Val Ala Tyr Pro Lys Pro Thr Thr Gly Ser Lys Lys Tyr Ala
 290 295 300
 Arg Asp Ile Val Tyr Gly Asn Ile Tyr Leu Gly Gly Leu Ala Tyr Gln
 305 310 315 320
 Pro Val Val Ile Lys Val Thr Phe Asn Glu Glu Ala Asp Ser Ala Tyr
 325 330 335
 Ser Ile Thr Phe Glu Phe Val Trp Asn Lys Glu Tyr Ala Arg Val Glu
 340 345 350
 Phe Glu Thr Thr Ser Phe Thr Phe Ser Tyr Ile Ala Gln Gln
 355 360 365

<210> 4
 <211> 330
 <212> PRT
 <213> Adenovirus

<400> 4
 Met Ala Lys Arg Ala Arg Leu Ser Thr Ser Phe Asn Pro Val Tyr Pro
 1 5 10 15
 Tyr Glu Asp Glu Ser Ser Ser Gln His Pro Phe Ile Asn Pro Gly Phe
 20 25 30
 Ile Ser Pro Asp Gly Phe Thr Gln Ser Pro Asn Gly Val Leu Ser Leu
 35 40 45
 Lys Cys Val Asn Pro Leu Thr Thr Ala Ser Gly Ser Leu Gln Leu Lys
 50 55 60
 Val Gly Ser Gly Leu Thr Val Asp Thr Thr Asp Gly Ser Leu Glu Glu
 65 70 75 80
 Asn Ile Lys Val Asn Thr Pro Leu Thr Lys Ser Asn His Ser Ile Asn
 85 90 95
 Leu Pro Ile Gly Asn Gly Leu Gln Ile Glu Gln Asn Lys Leu Cys Ser
 100 105 110
 Lys Leu Val Val Leu Thr Gly Lys Gly Ile Gly Lys Leu Gly Asn Gly
 115 120 125
 Leu Thr Phe Asp Ser Ser Asn Ser Ile Ala Leu Lys Asn Asn Thr Leu
 130 135 140
 Trp Thr Gly Pro Lys Pro Glu Ala Asn Cys Ile Ile Glu Tyr Gly Lys
 145 150 155 160
 Gln Asn Pro Asp Ser Lys Leu Thr Leu Ile Leu Val Lys Asn Gly Gly
 165 170 175

Ile Val Asn Gly Tyr Val Thr Leu Met Gly Ala Ser Asp Tyr Val Asn
 180 185 190
 Thr Leu Phe Lys Asn Lys Asn Val Ser Ile Asn Val Glu Leu Tyr Phe
 195 200 205
 Asp Ala Thr Gly His Ile Leu Pro Asp Ser Ser Ser Leu Lys Thr Asp
 210 215 220
 Leu Glu Leu Lys Tyr Lys Gln Thr Ala Asp Phe Ser Ala Arg Gly Phe
 225 230 235 240
 Met Pro Ser Thr Thr Ala Tyr Pro Phe Val Leu Pro Asn Ala Gly Thr
 245 250 255
 His Asn Glu Asn Tyr Ile Phe Gly Gln Cys Tyr Tyr Lys Ala Ser Asp
 260 265 270
 Gly Ala Leu Phe Pro Leu Glu Val Thr Val Met Leu Asn Lys Arg Leu
 275 280 285
 Pro Asp Ser Arg Thr Ser Tyr Val Met Thr Phe Leu Trp Ser Leu Asn
 290 295 300
 Ala Gly Leu Ala Pro Glu Thr Thr Gln Ala Thr Leu Ile Thr Ser Pro
 305 310 315 320
 Phe Thr Phe Ser Tyr Ile Arg Glu Asp Asp
 325 330

<210> 5
 <211> 581
 <212> PRT
 <213> Adenovirus

<400> 5
 Met Lys Arg Ala Arg Pro Ser Glu Asp Thr Phe Asn Pro Val Tyr Pro
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 Tyr Asp Thr Glu Thr Gly Pro Pro Thr Val Pro Phe Leu Thr Pro Pro
 20 25 30
 Phe Val Ser Pro Asn Gly Phe Gln Glu Ser Pro Pro Gly Val Leu Ser
 35 40 45
 Leu Arg Leu Ser Glu Pro Leu Val Thr Ser Asn Gly Met Leu Ala Leu
 50 55 60
 Lys Met Gly Asn Gly Leu Ser Leu Asp Glu Ala Gly Asn Leu Thr Ser
 65 70 75 80
 Gln Asn Val Thr Thr Val Ser Pro Pro Leu Lys Lys Thr Lys Ser Asn
 85 90 95
 Ile Asn Leu Glu Ile Ser Ala Pro Leu Thr Val Thr Ser Glu Ala Leu
 100 105 110

Thr Val Ala Ala Ala Ala Pro Leu Met Val Ala Gly Asn Thr Leu Thr
 115 120 125
 Met Gln Ser Gln Ala Pro Leu Thr Val His Asp Ser Lys Leu Ser Ile
 130 135 140
 Ala Thr Gln Gly Pro Leu Thr Val Ser Glu Gly Lys Leu Ala Leu Gln
 145 150 155 160
 Thr Ser Gly Pro Leu Thr Thr Thr Asp Ser Ser Thr Leu Thr Ile Thr
 165 170 175
 Ala Ser Pro Pro Leu Thr Thr Ala Thr Gly Ser Leu Gly Ile Asp Leu
 180 185 190
 Lys Glu Pro Ile Tyr Thr Gln Asn Gly Lys Leu Gly Leu Lys Tyr Gly
 195 200 205
 Ala Pro Leu His Val Thr Asp Asp Leu Asn Thr Leu Thr Val Ala Thr
 210 215 220
 Gly Pro Gly Val Thr Ile Asn Asn Thr Ser Leu Gln Thr Lys Val Thr
 225 230 235 240
 Gly Ala Leu Gly Phe Asp Ser Gln Gly Asn Met Gln Leu Asn Val Ala
 245 250 255
 Gly Gly Leu Arg Ile Asp Ser Gln Asn Arg Arg Leu Ile Leu Asp Val
 260 265 270
 Ser Tyr Pro Phe Asp Ala Gln Asn Gln Leu Asn Leu Arg Leu Gly Gln
 275 280 285
 Gly Pro Leu Phe Ile Asn Ser Ala His Asn Leu Asp Ile Asn Tyr Asn
 290 295 300
 Lys Gly Leu Tyr Leu Phe Thr Ala Ser Asn Asn Ser Lys Lys Leu Glu
 305 310 315 320
 Val Asn Leu Ser Thr Ala Lys Gly Leu Met Phe Asp Ala Thr Ala Ile
 325 330 335
 Ala Ile Asn Ala Gly Asp Gly Leu Glu Phe Gly Ser Pro Asn Ala Pro
 340 345 350
 Asn Thr Asn Pro Leu Lys Thr Lys Ile Gly His Gly Leu Glu Phe Asp
 355 360 365
 Ser Asn Lys Ala Met Val Pro Lys Leu Gly Thr Gly Leu Ser Phe Asp
 370 375 380
 Ser Thr Gly Ala Ile Thr Val Gly Asn Lys Asn Asn Asp Lys Leu Thr
 385 390 395 400
 Leu Trp Thr Thr Pro Ala Pro Ser Pro Asn Cys Arg Leu Asn Ala Glu
 405 410 415

Lys Asp Ala Lys Leu Thr Leu Val Leu Thr Lys Cys Gly Ser Gln Ile
 420 425 430
 Leu Ala Thr Val Ser Val Leu Ala Val Lys Gly Ser Leu Ala Pro Ile
 435 440 445
 Ser Gly Thr Val Gln Ser Ala His Leu Ile Ile Arg Phe Asp Glu Asn
 450 455 460
 Gly Val Leu Leu Asn Asn Ser Phe Leu Asp Pro Glu Tyr Trp Asn Phe
 465 470 475 480
 Arg Asn Gly Asp Leu Thr Glu Gly Thr Ala Tyr Thr Asn Ala Val Gly
 485 490 495
 Phe Met Pro Asn Leu Ser Ala Tyr Pro Lys Ser His Gly Lys Thr Ala
 500 505 510
 Lys Ser Asn Ile Val Ser Gln Val Tyr Leu Asn Gly Asp Lys Thr Lys
 515 520 525
 Pro Val Thr Leu Thr Ile Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp
 530 535 540
 Thr Thr Pro Ser Ala Tyr Ser Met Ser Phe Ser Trp Asp Trp Ser Gly
 545 550 555 560
 His Asn Tyr Ile Asn Glu Ile Phe Ala Thr Ser Ser Tyr Thr Phe Ser
 565 570 575
 Tyr Ile Ala Gln Glu
 580

<210> 6
 <211> 32
 <212> DNA
 <213> Adenovirus

<400> 6
 cgggatccgc caccatgtca aagaggctcc gg

32

<210> 7
 <211> 28
 <212> DNA
 <213> Adenovirus

<400> 7
 cgggatcctr attcttgggc yatatagg

28

<210> 8
 <211> 27
 <212> DNA
 <213> Adenovirus

<400> 8
cgcggatccg cgatgaagcg cgcaaga 27

<210> 9
<211> 36
<212> DNA
<213> Adenovirus

<400> 9
gattgggtca gccagtttca aagagagtac cccagg 36

<210> 10
<211> 33
<212> DNA
<213> Adenovirus

<400> 10
cctgggggtac tctctttgaa actgggtgac cca 33

<210> 11
<211> 27
<212> DNA
<213> Adenovirus

<400> 11
aaaactagtt cattcttggg cgatata 27

<210> 12
<211> 1116
<212> DNA
<213> Adenovirus

<400> 12
atgtcaaaga ggctccgggt ggaagatgac ttcaaccccg tctacccta tggctacgcg 60
cggaatcaga atatcccctt ccttactccc ccctttgtct catccgatgg attcaaaaac 120
ttcccacctg gggctcctgtc actcaaaactg gctgacccaa tcgccatcac taatgggggat 180
gtctcactca aggtgggagg gggactaact gtggaacaag atagtggaaa cctaagtgtgta 240
aaccctaagg ctccattgca agttggaaca gacaaaaaac tgggaattggc tttagcacct 300
ccatttgatg tcagagataa caagctagct attctagtag gagatggatt aaaggtaata 360
gatagatcaa tatctgattt gccaggtttg ttaaactatc ttgtagtttt gactggcaaa 420
ggaattggaa atgaagaatt aaaaaatgac gatggtagca ataaaggagt cggtttatgt 480
gtgagaattg gagaaggagg tggtttaact tttgatgata aaggttatgt agtagcatgg 540
aacaataaac atgacatccg cacactttgg acaactttag acccttctcc aaattgtaag 600
atagatatag aaaaagactc aaaactaact ttggtactga caaagtgcgg aagtcagatt 660
ttggcaaatg tatctctaata tatagtcaac ggaaagttca agatccttaa taacaaaaca 720
gacccatccc tacctaaatc atttaacatc aaactactgt ttgatcaaaa tggagttcta 780
ttggaaaatt caaacattga aaaacagtac ctaaaacttta gaagtggaga ctctattctt 840
ccagagccat ataaaaatgc aattggattt atgcctaatt tactagctta tgctaaaagct 900
acaactgac agtctaaaaat ttatgcaagg aacactatat atggaaatat ctacttagat 960
aatcagccat ataattccagt tgtaattaaa attactttta ataataagc agatagtgct 1020
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acttcattta ctttctccta tatcgcccaa gaatga 1116

10

<210> 13
<211> 14
<212> PRT
<213> Adenovirus

<400> 13
Leu Trp Thr Thr Leu Asp Pro Ser Pro Asn Cys Lys Ile Asp
1 5 10

<210> 14
<211> 14
<212> PRT
<213> Adenovirus

<400> 14
Leu Trp Thr Thr Pro Ala Pro Ser Pro Asn Cys Arg Leu Asn
1 5 10

<210> 15
<211> 14
<212> PRT
<213> Adenovirus

<400> 15
Leu Trp Thr Thr Pro Asp Pro Ser Pro Asn Cys Arg Ile His
1 5 10

<210> 16
<211> 14
<212> PRT
<213> Adenovirus

<400> 16
Leu Trp Thr Thr Pro Asp Thr Ser Pro Asn Cys Lys Ile Asp
1 5 10

<210> 17
<211> 14
<212> PRT
<213> Adenovirus

<400> 17
Leu Trp Thr Thr Pro Asp Thr Ser Pro Asn Cys Lys Ile Asp
1 5 10

<210> 18
<211> 14
<212> PRT
<213> Adenovirus

<400> 18
Leu Trp Thr Gly Pro Lys Pro Glu Ala Asn Cys Ile Ile Glu
1 5 10

<210> 19
 <211> 18
 <212> PRT
 <213> Adenovirus

<400> 19
 Gly Asp Ser Ile Leu Pro Glu Pro Tyr Lys Asn Ala Ile Gly Phe Met
 1 5 10 15

Pro Asn

<210> 20
 <211> 18
 <212> PRT
 <213> Adenovirus

<400> 20
 Leu Asp Pro Glu Tyr Trp Asn Phe Arg Asn Gly Asp Leu Thr Glu Gly
 1 5 10 15

Thr Ala

<210> 21
 <211> 18
 <212> PRT
 <213> Adenovirus

<400> 21
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 1 5 10 15

Asn Pro

<210> 22
 <211> 18
 <212> PRT
 <213> Adenovirus

<400> 22
 Leu Gly Lys Ser Tyr Trp Asn Phe Arg Asn Glu Asn Ser Ile Met Ser
 1 5 10 15

Thr Ala

<210> 23
 <211> 18
 <212> PRT
 <213> Adenovirus

<400> 23

Leu Asp Ser Thr Tyr Trp Asn Phe Arg Ser Asp Asn Leu Thr Val Ser
1 5 10 15

Glu Ala

<210> 24

<211> 8

<212> PRT

<213> Adenovirus

<400> 24

Ser Ala Arg Gly Phe Met Pro Ser
1 5